## UND Formula SAE

#### UND UNIVERSITYOF NORTH DAKOTA. LEADERS IN ACTION.

# About Us

- Joshua Dahn
  - Mechanical Engineering Senior
  - Vice President
  - Steering & Suspension Technical Lead

- James Meyers
  - Mechanical Engineering Junior
  - Outreach Coordinator
  - Engine & Drivetrain Technical Lead





NORTH DAKOTA



## Who We Are

- UND Student Organization
  - 30 Students, Freshman to Graduate
  - Primarily Engineering
    - Other Schools Represented Including Business & Aviation





# What We Do

- Compete in Formula SAE Competition
- Community Outreach
  - FIRST Robotics
  - FIRST Lego League
  - Rydell Car & Bike Show
  - UND STEM Day
  - SCCA Racing
  - Host Guest Lecturers



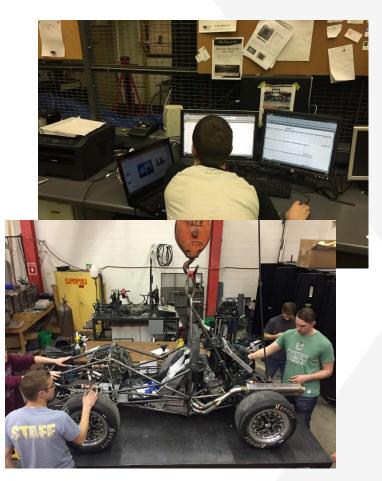






## Formula SAE Summary

- Design, Build, Test Open Wheel Racecar
- Research and Development, Sep.-Dec.
- Build and Test, Jan.-May
- Competition
  - June 20-23<sup>rd</sup> Lincoln, NE. Airfield
  - 80 Other Teams in Our Class
  - 2017 Resulted in a Team Best Finish



# Competition

#### 8 Events

- 5 Dynamic Events
  - Acceleration
  - Skidpad (Handling)
  - Autocross (Fastest Lap)
  - Endurance
  - Fuel Economy (Occurs During

- **3 Static Events** 
  - Cost & Manufacturing Analysis
  - **Design Judging**
  - **Business Presentation**





## Project Developments for 2018

- Full Aerodynamic Package

   Massively Improve Handling
- All-New Exhaust Design
  - Increase Drivability and Predictability of Car
- Differential Mount Redesign
  - Increase Reliability
- Aircraft Grade Fabric Skin
  - Decrease Production Cost









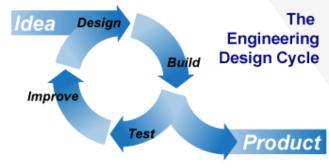
These changes and *many more* should make 2018 UND Formula SAE's best year ever!





## **Professional Development**

- Simulated Industrial Experience
  - Designed to Emulate Small Business
    - Team Broken Down into Subteams with Established Hierarchy
- Enhance Engineering Education
  - Largest Engineering Project at UND
    - Full Engineering Cycle
  - Supports Engineering Capstone Project



#### **UND** UN I VER SITYOF NORTH DAKOTA

## Academic & Career Opportunities

- Internationally Recognized Project
  - Many Companies Regard Formula SAE Highly
  - Hands On Application of Classwork
  - Project Components Can Often Be Used As Class Projects
- Opportunity to Work Closely With Industry
- A Selection of Companies UND Formula SAE Alumni/Members Have Gone On to Work For





## Thank You!





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